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ECA ACTIVITIES IN THE SECTOR OF INLAND WATER TRANSPORT

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Introduction

1. The importance of the hydrographic system in the East African and Southern African subregion distinguishes it from the other African sub-regions. These vast stretches of water are mainly used for inland water transport. There is therefore an obvious interest and even the necessity to develop this mode of transport in the subregion. These waterways have generated zones of intensive activity. Lately however, a decline in this economic sector has been observed on most of those waterways. Alarmed by this situation, the highest African authorities, the Ministers of Transport, Communications and Planning, took the decision to give priority to action in favour of five of the seven international lakes in the subregion in the context of the Transport and Communication Decade for Africa and in the sector of river and lake Transport in particular. The lakes concerned are: lake Tanganyika, Lake Malawi, Lake Victoria and its affluents, Lake Kariba and Lake Kivu as well as the greatest river flowing through this part of Africa: The Zambezi; (objectives pertaining to river and lake transport within the purview of the global strategy and the plan of action of the Transport and Communications Decade for Africa). By itself it is a vast programme which requires a plan of action. This plan of action has been outlined in the context of the Decade and was defined more clearly at the meeting of intergovernmental experts on Transport, Communications and Planning held in Addis Ababa from 5 to 14 January 1983. The report of this meeting was examined and adopted by the Conference of Ministers of Transport, Communications and Planning held in Cairo from 8 to 11 March 1983.

2. The following decision was taken in view of:

- The shortage of skilled manpower in all sectors of inland water transport,
- The fact that the concept of a single hydrographic entity for each of the African hydrographic basin is one of the essential prerequisites for conceiving a rational exploitation of those basins in any sector, and the transport sector in particular,
- the fact that most of the African waterways are used for navigation in their natural state,
- The fact that transport equipment used at present on most of those waterways is absolete and/or inadequate,

that immediate action to develop inland water transport must be governed by the following priorities:

(a) training staff in all the special skills required by this sector (management, hydrologists, hydrographers, seamen, shipbuilders and shiprepairers, etc);

(b) the establishment of intergovernmental bodies for an integrated exploitation of the waterways;

(c) The development of the waterways (studies, design and construction of adequate waterways and efficient port infrastructures;

(d) Adaptation; modernization and standardardization of equipment used for inland water transport.

3. The role of ECA in its efforts to develop inland water transport in cooperation with African States has always been guided by the aforesaid. In the East African and the southern African subregions in particular, emphasis was put mainly on training, research, and the establishment of joint management bodies for the waterways, studies on the development of inland water navigation, studies on how to adapt the equipment to the conditions of navigability of the waterways which implied thorough knowledge of these conditions.

A. Role of ECA in training manpower for inland water transport in the East and Southern African subregion

4. This is a problem related to the availability of human resources. The traditional approach is to identify the needs and then seek ways and means to meet those needs. This procedure requires a certain period of time to be put into effect. The situation prevailing does not seem to correspond to the needs of the African States concerning staff requirements in the inland water transport sector and immediate action must be taken. For this reason while at the same time ECA pursues its efforts to implement action dictated by the traditional approach, it also gives due attention to the immediate needs i.e. efforts in two main directions pertaining to training African manpower in inland water transport:

(a) Assessing the requirements: This includes projet No. RAF/80/002 financed by UNDP and entitled: "Training programme for African personnel in Inland water transport." This involves the identification of present qualification levels, estimates of future requirements, facilities available at present for training in the sector of river and lake transport.

During this first phase, the situation in several countries of the Eastern and Southern African subregion was examined carefully. The study has shown mainly that:

At all levels of qualification there is a shortage of manpower compared to present needs,

- Although some training centres exist and are scattered over several States of the subregion, their management problems must be solved at the subregional even at the national level. It was also observed that these centres were established for training intermediate and even lower category personnel.

- The need arises therefore on the one hand, to reorganize the centres in order to use them fully at the national and subregional level. On the other hand a subregional training centre for upper-level staff must be established. These two steps which constitute the second stage of the action are part of the main activities to be undertaken by ECA in the future.

(b) ECA wishes to emphasize that the full support of the states of the sub-region will be required if this objective is to be attained, and in particular, in order to update and complement the information gathered in the preliminary study, which was limited in its scope. The availability of updated data is an important factor in the preparation of the terms of reference of the final study for the establishment of a subregional training centre for Eastern and Southern Africa.

(b) Parallel programme of action. Inland water transport in Africa is confronted with two types of personnel problems: On the one hand, the need for immediate steps to provide training for upper-class managerial staff, for which there is shortage at all levels and in all sectors, on the other hand the long period of time required to establish a subregional training centre of the required level and to make it operational.

In view of that situation, ECA has come to the conclusion that parallel action must be undertaken by organizing accelerated training programmes for African professionals having enough experience and adequate technical background (engineers, economists, company executives) and capable of assimilating an intensive programme over a short period of time. This training would enable them to take charge of higher responsibilities in the development of inland water transport in their respective countries. The first such experiment was organized at the Leningrad Inland Water Transport Institute (USSR) with the financial backing of UNDP. The programme was devoted mainly to management i.e. economics, organization and planning of inland water transport. The programme lasted three months (26 April to 26 July 1982).

7. This programme provided high level and intensive training. It required a high capacity of assimilation from the participants. That is the reason why ECA adopted strict admission requirements (upper level managerial staff in the water transport sector). ECA has noted with great satisfaction that the Council of Ministers of the MULPOC of the Eastern and Southern African States held in Mbabane (Kingdom of Swaziland) from 14 to 16 February 1983, formally recommended that ECA pursue this action (para. 42-43 of the report of the meeting).

8. In keeping with this recommendation, ECA is considering a similar programme for the near future. However ECA wishes to point out that the following requirements must be complied with if the programme is to be successful.

- The participants must have a background strictly in conformity with the profile defined by ECA.

- The courses offered must be relevant to actual problems for which rapid solutions are needed to improve inland water transport in the country concerned. Admittedly, these problems may vary from a country to another. They must therefore be clearly identified and their most important aspects must be emphasized. For this purpose, ECA will prepare questionnaires to be distributed to the States. It is of the highest importance that each country answers the above questionnaire with as much attention as possible to ensure the success of the programme.

B. Establishment of joint management bodies for the waterways

9. It is not always possible and it is not even advisable to consider the multiple uses of waterways separately even if these involve varied technologies such as irrigation, hydroelectricity, inland water navigation etc. Even if one of those activities was to be considered separately, the problems of all nature that are involved cannot be solved through this approach. These considerations notwithstanding, and if for the purpose of this document we have to mention the specific problems related to navigation on international waterways, it must be emphasized that only through international cooperation can a rational mode of exploitation be achieved (from the technical, economic, social and even political standpoint) at the national and the sub-regional level.

10. It is a well known fact that any technical solution to the development of waterways for the purpose of navigation (regulation, canalization, channel stabilization, excavation by dredging) is basically governed by the principle of unity of the hydraulic networks of the basin or at least by its main components. Any action aimed at pinpoint or temporary improvement can only be partial and would be likely to provoke catastrophic reactions in other parts of the river (uncontrollable sedimentation, shifting beds, modification of the hydraulic regime). This in turn would have a direct impact on the economics of water transport on these waterways and can possibly create an unfavourable political climate.

11. In keeping with the strategy adopted by the African Ministers of Transport, Communications and Planning for inland water transport, ECA therefore attaches particular importance to the establishment of joint management bodies to carry out common development policies for the basin. Such an organisation must be designed from the outset to achieve better common development of the main national activity in the basin. Generally, speaking, inland water transport has emerged as the main possibility of economic development of the basin because all other activities can flourish only with an adequate transport system. For this reason, joint management of inland water transport has always constituted the starting point for all international organizations whose purpose is the development of the waterways of the hydrographic basins.

12. ECA is at present engaged in that direction in two hydrographic basins covering some countries in the Eastern and Southern African subregion. These are first: the basins of three lakes in the subregion; (lakes Victoria, Tanganyika and Kivu). Following a request from the countries concerned, ECA has undertaken a preliminary study for an efficient and integrated transport system on these lakes. ECA is also actively engaged in the preparation of the study that was recommended, i.e. defining the procedure for the establishment of a joint Transport Company on Lakes Tanganyika and Kivu. The scope of this study will certainly have to be broadened and extended to all the riparian States using these lakes for transport. It should be noted that the first part of that report concerning the "present navigating conditions on the lakes" as defined in appendix C of the report of the preliminary

study is included in the main chapter of the study on inland water transport being undertaken by ECA in the subregion.

13. Furthermore ECA is currently working on a study for the establishment of an international organization for the joint development of a hydrographic basin covering four countries of the subregion, namely Rwanda, Burundi, the United Republic of Tanzania and Zambia. This is the Congo/Zaire river basin which covers nearly 10 per cent of the territories of these countries. The study is mainly concerned with joint management of navigation on the river and will recommend the best method of organisation taking into account the prevailing situation. The report will be communicated to the governments for review by the specialized agencies prior to technical meeting to be organized later in order to prepare the final report to be submitted to the respective governments.

C. Studies for the Development of Inland Water Transport

14. One country in the subregion has requested the services of ECA in that sector. The Government of Ethiopia has requested the assistance of ECA to undertake a study on the development of Transport on the country's lakes and rivers (Baro and Akobo rivers, lakes Tana, Abaya and Chamo). ECA has worked out the terms of reference for the study and has established a joint working group composed of an expert from ECA and technicians from the Department concerned with Inland Water Transport in Ethiopia. The studies started in June 1983 and are nearing completion.

15. Other actions undertaken by ECA in the subregion include a study on the Inland Water Transport system.

16. This study includes mainly: carrying out an inventory of data gathered on these waterways, analyzing their content, recommendations and conclusions from previous studies and reviewing action or decisions that were taken as a result of these surveys; the present situation and prospects in the sector of inland water transport in the subregion and the main waterways in particular (conditions of navigability, facilities available or to be installed, whether they should be kept or improved, port equipment available, transport equipment and present or future maintenance facilities. The organisation of transport management on the waterways, statistics on transport etc.)

17. This study is now under way and it will be submitted to the countries of the subregion as soon as the final report is completed. ECA expects to derive much from observations to be made by the specialized services in the countries concerned: these will enable ECA to make the best use possible of the conclusions of the study.

D. Study on how to adapt the equipment to the conditions of navigability in the waterways

18. Compared to other modes of ground transport, inland water transport must compensate for its slowness (low speed, longer idle periods) through lower transport fares, regular and dependable service. This requires adequate equipment in addition to the appropriate staff and a well organized set-up. The equipment must be adapted to the goods to be carried and to the conditions of navigability in the waterway. The situation is however that the equipment currently used on African waterways is not only obsolete but also inadequate for efficient use. At the request of the countries of the Eastern and Southern African subregion, ECA has undertaken a study on the subject in order to define the type of vessels indicated for one of the most important river in the subregion: The Zambezi and its hydrological network (rivers and artificial lakes along its course.) The study was undertaken by ECA and was consigned in report No. RAF/80/26. This preliminary study has paved the way for a thorough survey for which a draft document was prepared by ECA and submitted to UNDP for evaluation and financing. This study covers three main items:

- The definition of the present and future traffic on the waterways that constitute the river (nature of goods, present and future quantities for each type of goods, zones and directions etc).

- A survey of the various means of transport on the river, conditions of navigability under the prevailing hydrometiorologic situations, the development of these conditions of navigability under the influence of the trends in traffic and the various development works within the basin of the river (irrigation catchments, hydroelectric dams, industrial projects along the river etc.)

- The evaluation of the existing fleet, including the design of vessels adapted to the volume of traffic and to the conditions of navigability, adequate port infrastructures and superstructures for the movement and handling of the vessels, the system of navigation proposed (towing; pushing; automotive vessels) the dimensions of the structures required by navigation (canal locks, width and bents of the channels, traffic control, the composition of the fleet and estimates on the requirements.

E. Other activities of ECA in the sector of inland water transport

19. Other activities include mainly, assistance to member States in the preparation of projects concerning the Eastern and Southern African subregion within the framework of the United Nations Transport and Communications Decade for Africa.

Conclusion

20. ECA is pursuing its efforts, concurrently with the countries of the Eastern ans Southern African subregion to develop inland water transport. In keeping with the recommendations of the African Ministers of Transport, Communications and Planning future action in the sector of inland water transport will put emphasis on the following:

- problems related to training personnel in inland water transport
- the establishment of international organisations for a joint exploitation of the waterways
- problems related to the development of infrastructure (waterways and ports)
- Adaptation, modernization and standardization of equipment.

21. In the Eastern and South ern African subregion in particular, ECA believes that the priorities of this plan of action should be adhered to. It wishes to emphasize that the basic concept of the establishment of joint organizations for inland water transport should be investigated even further in the subregion.